

SYSTEM AND METHOD FOR IMAGE-BASED RENDERING WITH
PROXY SURFACE ANIMATION

ABSTRACT OF THE DISCLOSURE

Methods and systems for animating with proxy surfaces are provided. A method for animating includes preprocessing an object to form proxy surfaces of part(s) and/or joint(s), and rendering the proxy surfaces to be animated. In an embodiment, preprocessing includes dividing an object to be animated into parts that can move independently without changing shape, forming a proxy surface for each of the parts corresponding to an initial viewing direction, and obtaining a set of view textures for each of the proxy surfaces. Each part proxy surface is then rendered at a new viewing direction. The new viewing direction is function of an object transformation, part transformation, and an initial viewing direction. The object is then animated by repeating the rendering steps. In another embodiment, the object to be animated is divided into parts and at least one joint that can change shape.